UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,424	09/21/2001	Junya Watanabe	14944	5559

23389 7590 06/27/2005	EXAMINER
SCULLY SCOTT MURPHY & PRESSER, PC	REVAK, CHRISTOPHER A
400 GARDEN CITY PLAZA	

	ART UNIT	PAPER NUMBER
SUITE 300	2131	
GARDEN CITY, NY 11530		

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/960,424	WATANABE, JUNYA
	Examiner	Art Unit	
	Christopher A. Revak	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 December 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-12_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-12_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _21 September 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All   b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _see attached_.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d).

Information Disclosure Statement

2.   The information disclosure statements (IDS) submitted are in compliance with the

provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being

considered by the examiner.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

4.   Claims 11 and 12 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. The claims currently recite of a

program not tangibly embodied which is just software alone and of itself. The examiner

suggests amending the claims so that the program is embodied on a computer readable

storage device.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1,2,5,6, and 9-12 are rejected under 35 U.S.C. 102(e) as being

anticipated by Venkatesan et al, U.S. Patent 6,801,999.

As per claim 1, it is disclosed by Venkatesan et al of a digital contents generating

apparatus that comprises an electronic watermark data output unit for outputting

predetermined electronic watermark data. An electronic watermark data embedding

unit for embedding the electronic watermark data output by the electronic watermark

data output unit in digital contents. An encryption key generating unit generates an

encryption key based on the electronic watermark and a predetermined IP address. An

encryption unit encrypts the digital contents embedded with electronic watermark by

means of the generated encryption key and outputting the encrypted digital contents to

a communication network. A decryption unit generating unit generates, on the basis of

the electronic watermark data and IP data received from the communication network, a

decryption key for the decryption of the encrypted digital contents and outputting the

decryption key to the communication network (col. 18, lines 62-67 and col. 33, line 39

through col. 34, line 7).

As per claim 2, Venkatesan et al teaches of an encryption unit that stores the encrypted contents in a data storage medium (col. 18, lines 62-67).

As per claim 5, Venkatesan et al discloses of a digital content reproducing apparatus comprising an electronic watermark data extraction unit for receiving encrypted digital contents embedded with electronic watermark data from a communication network and extracts the electronic watermark data from the encrypted digital contents. A decryption unit decrypts the encrypted digital contents by means of a decryption key. A reproducing unit reproduces an output of the decryption unit and displays a reproduced output on a display unit. A network interface unit outputs extracted electronic watermark data and a predetermined IP address to the communication network and receives the decryption key from the communication network (col. 33, line 39 through col. 34, line 7).

As per claim 6, Venkatesan et al teaches of an electronic watermark data extraction unit receives the encrypted digital contents embedded with electronic watermark data from a data storage medium (col. 18, lines 62-67).

As per claim 9, Venkatesan et al discloses of a digital contents providing system comprising a communication network, a digital contents generating apparatus and a digital contents reproducing apparatus. The digital contents generating apparatus and digital contents reproducing apparatus being inter-connected via said communication network. The digital contents generating apparatus comprise an electronic watermark-data output unit for outputting predetermined electronic watermark data. An electronic watermark data embedding unit for embedding the electronic watermark data received

from the electronic watermark data output unit in digital contents. An encryption key

generating unit for generating an encryption key on the basis of said electronic

watermark data and a predetermined IP address. An encryption unit for encrypting the

digital contents in which said electronic watermark data has been embedded, by means

of the generated encryption key. A decryption-key generating unit for generating a

decryption key for decrypting, on the basis of said electronic watermark data and said IP

address received from said communication network, the encrypted digital contents, and

outputting the decrypted digital contents to the communication network. The digital

contents reproducing apparatus comprise an electronic watermark data extraction unit

for receiving the encrypted digital contents from the communication network and

extracting the electronic watermark data from the encrypted digital contents. A

decryption unit for receiving the decryption key from the communication network, and

decrypting the encrypted digital contents by means of the decryption key. A

reproducing unit for reproducing an output of the decryption unit and displaying a

reproduced output on a display unit. Means for outputting the extracted electronic

watermark data and the predetermined IP address to the communication network (col.

18, lines 62-67 and col. 33, line 39 through col. 34, line 7).

As per claim 10, Venkatesan et al discloses of a digital contents providing system

comprising a communication network, a digital contents generating apparatus and a

digital contents reproducing apparatus. The digital contents generating apparatus and

the digital contents reproducing apparatus being inter-connected via the communication

network. The digital contents generating apparatus comprise an electronic watermark

data output unit for outputting predetermined electronic watermark data. An electronic

watermark data embedding unit for embedding the electronic watermark data received

from the electronic watermark data output unit in digital contents. An encryption key

generating unit for generating an encryption key on the basis of the electronic

watermark data and a predetermined IP address. An encryption unit for encrypting the

digital contents in which the electronic watermark data has been embedded, by means

of the generated encryption key, and outputting the encrypted digital contents to a data

storage medium. A decryption-key generating unit for generating, on the basis of the

electronic watermark data and IP address received from the communication network, a

decryption key for the decryption of the encrypted digital contents, and outputting the

decryption key to the communication network. The digital contents reproducing

apparatus comprise an electronic watermark data extraction unit for receiving the

encrypted digital contents from the data storage medium and extracting the electronic

watermark data from said encrypted digital contents. A decryption unit for receiving the

decryption key from the communication network and decrypting the encrypted digital

contents by means of said decryption key. A reproducing unit for reproducing an output

of the decryption unit and displaying a reproducing output on a display unit and means

for outputting the extracted electronic watermark data and the predetermined IP

address to the communication network (col. 18, lines 62-67 and col. 33, line 39 through

col. 34, line 7).

As per claim 11, Venkatesan et al teaches of a program for carrying out steps for

the embedding of electronic watermark data in digital contents by the use of a computer

system including a processor and a memory unit. An encryption key is generated on

the basis of the electronic watermark data and a predetermined IP address. Encrypting

digital contents embedded with the electronic watermark data, by means of the

encryption key and outputting the encrypted digital contents to a communication

network. Generating, on the basis of the electronic watermark data and IP address

received from the communication network, a decryption key for the decryption of the

encrypted digital contents, and outputting the decryption key to said communication

network (col. 18, lines 62-67 and col. 33, line 39 through col. 34, line 7).

As per claim 12, it is taught by Venkatesan et al of a program for carrying out

steps for extracting electronic watermark data from digital contents embedded with the

electronic watermark data by the use of a computer system including a processor,

memory unit and display means and displaying the digital contents by said display

means. Encrypted digital contents are received with an embedded electronic

watermark data from a communication network and extracting the electronic watermark

data from the encrypted digital contents. Decrypting the encrypted digital contents by

means of a decryption key. Reproducing the decrypted digital contents and outputting a

reproduced digital contents to the display means, outputting the electronic watermark

data and a predetermined IP address to the communication network, and receiving said

decryption key from the communication network (col. 18, lines 62-67 and col. 33, line 39

through col. 34, line 7).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 3,4,7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Venkatesan et al, U.S. Patent 6,801,999 in view of Wu et al, U.S. Patent

6,700,991.

As per claim 3, it is disclosed by Venkatesan et al of a digital contents generating

apparatus that comprises an electronic watermark data output unit for outputting

predetermined electronic watermark data. An electronic watermark data embedding

unit for embedding the electronic watermark data output by the electronic watermark

data output unit in digital contents. An encryption key generating unit generates an

encryption key based on the electronic watermark and a predetermined IP address. An

encryption unit encrypts the digital contents embedded with electronic watermark by

means of the generated encryption key and outputting the encrypted digital contents to

a communication network. A decryption unit generating unit generates, on the basis of

the electronic watermark data and IP data received from the communication network, a

decryption key for the decryption of the encrypted digital contents and outputting the

decryption key to the communication network (col. 33, line 39 through col. 34, line 7).

The teachings of Venkatesan et al are silent in disclosing of the use of discrete cosine

transformation unit, or DCT unit, to generate DCT coefficients. It is disclosed by Wu et

al of using discrete cosine transformation unit, or DCT unit, to generate DCT coefficients (col. 2, lines 10-26). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have been motivated to apply discrete cosine transformations used for watermarking data. Wu et al discloses motivation for the use of discrete cosine transformations by reciting of the need to increase invisibility of the watermark (col. 2, lines 61-65). It is obvious that the teachings of Venkatesan et al would have found the teachings of Wu et al beneficial as a further means of protecting watermarked content.

As per claim 4, Venkatesan et al teaches of an encryption unit that stores the encrypted contents in a data storage medium (col. 18, lines 62-67).

As per claim 7, Venkatesan et al discloses of a digital content reproducing apparatus comprising an electronic watermark data extraction unit for receiving encrypted digital contents embedded with electronic watermark data from a communication network and extracts the electronic watermark data from the encrypted digital contents. A decryption unit decrypts the encrypted digital contents by means of a decryption key. A reproducing unit reproduces an output of the decryption unit and displays a reproduced output on a display unit. A network interface unit outputs extracted electronic watermark data and a predetermined IP address to the communication network and receives the decryption key from the communication network (col. 33, line 39 through col. 34, line 7). The teachings of Venkatesan et al are silent in disclosing of an inverse DCT unit for performing inverse discrete cosine transformations. It is disclosed by Wu et al of inverse DCT unit for performing inverse

discrete cosine transformations (col. 2, lines 10-26). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have been motivated to apply performing inverse discrete cosine transformations. Wu et al discloses motivation for the use of inverse discrete cosine transformations by reciting of the need to increase invisibility of the watermark (col. 2, lines 61-65). It is obvious that the teachings of Venkatesan et al would have found the teachings of Wu et al beneficial as a further means of protecting watermarked content.

As per claim 8, Venkatesan et al teaches of an electronic watermark data extraction unit receives the encrypted digital contents embedded with electronic watermark data from a data storage medium (col. 18, lines 62-67).

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Revak whose telephone number is 571-272-3794. The examiner can normally be reached on Monday-Friday, 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Revak
AU 2131

CR

June 22, 2005